

Jackson Wheeler

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Technically advanced in **C**, **Java**, **Python**, and in **networking** and **software engineering** fundamentals. Seeking **computer networking**, **embedded**, or **general software engineering** internship opportunities. Passionate and driven engineer with strong social and communication skills. Committed to being a quick learner and important problem solver.

EDUCATION

University of California, San Diego

Sept. 2020 – June 2024

B.S. Computer Science / GPA: 3.82

Yonsei University, South Korea

Summer – Fall 2022

Exchange Program (Courses: Compiler Design, Computer Vision, Korean Lang.)

WORK

Software Engineer Intern | *Marine Corps Tactical Systems Support Activity (SaxmanOne)*

Summer 2021

Took the **lead** in developing code for the automated testing of a military Windows application

- Program **creates** detailed friendly/enemy tracks according to specifications in CSV file
- **Discovered** and **implemented** WinAppDriver as superior tool over Winium for Windows application automation
- **Trained** teammates in the usage of WinAppDriver in Windows application automation

PROJECTS

Router Implementation | *C; Networking Protocols: Ethernet, ARP, IP, ICMP*

March 2023

- Developed code to **accurately & efficiently route** and send incoming packets to the next step in the network, given the packet's final destination, and according to the **IP** networking protocol.
- **Improved efficiency** by implementing custom data structures (Trie for longest prefix match, Hash Table for router interface lookup)

Sliding Window Protocol | *C; Networking Protocols: Sliding Window, CRC-8, Framing*

February 2023

- Implemented sliding window protocol to ensure **reliable in-order delivery** of messages between senders and receivers
- Designed & implemented **sliding window data structure** in order to abstract away sliding window implementation details

Portfolio Website | *HTML, CSS, JavaScript*

Winter 2023

- **Challenged** myself to **implement newly learned skills** (HTML, CSS, and JavaScript) in the meaningful and important project of implementing a portfolio website
- Developed with **user experience in mind**: usability, performance, accessibility

Team: San Diego Zoo Exhibit Navigation App | *Android Studio, Java, Agile*

Spring 2022

- Implemented **Agile** process in team of 6 to plan and deliver application meeting customer's requirements
- **Integrated** back-end team and front-end team's code
- Established better **communication** between pair-programming teams

Mutual Fund Analysis | *Python, Selenium, XlsxWriter*

Summer 2020

Built program that **web scrapes** mutual fund data from Charles Schwab website and outputs organized Excel file

- Implemented Pickle library to **serialize** data, splitting program into two and **solving long run time**
- Implemented YFinance **API** for rapid fetching of current price data
- Implemented XlsxWriter to **output organized Excel file** for fund comparison and analysis

SKILLS

Languages/Tools: *C, Java, Python, C++*; Bash, Linux, Makefiles; git/GitHub; Android Studio; SQL, HTML, CSS, JavaScript

Courses: *Computer Networks, Compiler Design, Software Engineering (incl. Agile), Algorithms, Data Structures, Web Development, Database System Principles, Functional Programming (WIP: Operating Systems, Digital Systems)*

Excellence: *Quick Learner, Problem Solver, Communicator & Team Player, Dependable*

Other: Conversational in Korean Language

Active Secret Level Security Clearance